DANGERS ASSOCIATED WITH AUTOMATIC CHANNEL SWITCHING ON DIGITAL SELECTIVE CALLING (DSC) EQUIPPED VHF MARINE RADIOS

It has come to the Coast Guard’s attention that an automatic channel switching feature found on certain models of Digital Selective Calling (DSC) equipped VHF marine radios may create an unintended hazard by automatically switching from a working channel that might be in use at the time to Channel 16 when the VHF marine radio receives a DSC distress alert, distress alert acknowledgment or other DSC call where a VHF channel number has been designated. This could happen without a vessel/radio operator's immediate knowledge and could initiate an unsafe condition by which the vessel/radio operators would believe they were communicating on a working channel such as Channel 13 when, in fact, they were actually on Channel 16. Imagine a towboat operator on the lower Mississippi River making passing agreements on VHF channel 67 and then suddenly, without warning, not being able to quickly reestablish communications with those vessels because his/her radio automatically switched to Channel 16 instead.

Since this unsafe condition can happen at any time, the Coast Guard strongly recommends disabling the automatic channel switching feature when maintaining a listening watch or communicating on the designated bridge-to-bridge radiotelephone, or while monitoring the vessel traffic services (VTS) channel. Radios that lack the disabling feature should not be used for bridge-to-bridge or VTS communications.

The International Telecommunications Union Sector for Radiocommunications, Recommendation M.493-11 published in 2004 and later versions require DSC-equipped radios to provide for disabling of this channel auto-switch feature. In the United States, the Federal Communications Commission (FCC) requires all DSC-equipped radios certified after March 25, 2009 to meet this requirement. Manufacturers that do not provide a disable function are encouraged to do so and to inform their customers if means for correction exist. Updated information including a listing of manufacturers of radios believed to be affected by this Safety Alert will be posted as available at http://www.navcen.uscg.gov/marcomms/gmdss/dsc.htm.

The Coast Guard strongly reminds radio operators and other users to always ensure they are on the proper operating channel when communicating or maintaining watch, particularly with DSC-equipped radios capable of channel auto-switching.

This safety alert is provided for informational purposes only and does not relieve any domestic or international safety, operational or material requirement. Developed by the Spectrum Management and Telecommunications Policy Division (CG-652), United States Coast Guard Headquarters, Washington, DC. Questions should be directed to Mr. Russell Levin at (202) 475 3555 or Russell.S.Levin@uscg.mil.